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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,072	02/13/2006	Masaki Ukai	P71118US0	7453

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EXAMINER

REDDY, KARUNA P

ART UNIT	PAPER NUMBER
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1713

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/568,072	Applicant(s) UKAI ET AL.	
	Examiner Karuna P. Reddy	Art Unit 1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/3/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Preliminary amendment filed on April 23, 2007 is made of record. Claims 1-16 are amended. Claims 1-16 are now pending in the application.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The term "non-aqueous" is not recited in the specification.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1713

5. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Wilkins (GB 1, 157, 436).

Wilkins et al disclose a cold-curing two part synthetic resin composition that can be mixed together and then used in a liquid or semi-liquid condition and after mixing set to a hard infusible mass without the application of heat (page 1, lines 11-17). The resin composition comprises two syrups "A" and "B" (page 1, lines 54-56). See example 1, wherein the methyl methacrylate monomer in syrup "A" reads on gelling agent of liquid B. The plasticizer i.e. dicyclohexyl phthalate is in syrup "B". For some applications of improved resin composition it may be necessary for the mixture of syrups "A" and "B" to have a higher initial viscosity. In such cases syrup "B" may be thickened by a vinyl acetate / maleic anhydride copolymer or vinyl chloride / maleic anhydride copolymer (page 2, lines 59-68) and reads on the thermoplastic resin.

Therefore, Wilkins anticipates the instant invention.

6. Claims 1 and 3 is rejected under 35 U.S.C. 102(b) as being anticipated by Gerhard et al (EP 0 433 069 A2).

Gerhard et al disclose a two part polyurethane composition for use as an adhesive/sealant (abstract). See example 1 wherein "Part A" comprises a hydroxy-terminated polybutadiene which reads on the thermoplastic resin, and di-octyl phthalate as a plasticizer. "Part B" comprises plasticizer which reads on the gelling agent of liquid B.

Therefore, Gerhard et al anticipate the instant invention.

Claim Rejections - 35 USC § 102/103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
9. Claims 10-11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wilkins (GB 1, 157, 436) or Gerhard et al (EP 0 433 068 A2).

The discussion with respect to Wilkins and Gerhard et al in paragraph 5 and 6 respectively is incorporated herein by reference.

The prior art of Wilkins or Gerhard et al is silent with respect to gelling time of 30 seconds to 60 minutes and the sprayable viscosity.

However, in light of the fact that prior art teaches / discloses essentially the same composition as that of the claimed, one of ordinary skill in the art would

Art Unit: 1713

have a reasonable basis to believe that two part composition of prior art exhibits essentially the same property(ies). Since PTO cannot conduct experiments, the burden of proof is shifted to the applicants to establish an unobviousness difference. See *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980).

Even if properties of the two part composition of instant claims and prior art examples are not the same, it would still have been obvious to one of ordinary skill in the art to make a two-part composition having the claimed properties because it appears that the references generically embrace the claimed thermoplastic resin, plasticizer and gelling agent and the person of ordinary skill in the art would have expected all embodiments of the reference to work. Applicants have not demonstrated that the differences, if any, between the claimed composition and the composition of prior art give rise to unexpected results.

Claim Rejections - 35 USC § 103

10. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilkins (GB 1, 157, 436) or Gerhard et al (EP 0 433 068 A2).

The discussion with respect to Wilkins and Gerhard et al in paragraph 5 and 6 respectively is incorporated herein by reference.

The prior art of Wilkins or Gerhard et al is silent with respect to the proportions of gelling agent and thermoplastic resin.

However, the composition of prior art comprises essentially the same components as that of the instant invention. It is held that where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. See *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977). See also *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). See also *Peterson*, 315 F. 3d at 1330, 65 USPQ 2d at 1382 ("The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation or desire to determine where in a disclosed set of percentage ranges is the optimum range of percentages). Therefore, in the absence of criticality or unexpected results, it would have been obvious to one skilled in the art at the time invention was made to alter the proportions of various components in Wilkins or Gerhard et al's two pack composition as a matter of routine optimization and arrive at the instant invention.

11. Claims 7-9 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilkins (GB 1, 157, 436) or Gerhard et al (EP 0 433 069 A2) independently, in view of Nakano et al (US 5, 166, 229).

The discussion with respect to Wilkins and Gerhard et al in paragraph 5 and 6 respectively is incorporated here in by reference.

The prior art reference of Wilkins or Gerhard et al is silent with respect to

- a) thermosetting epoxy resin, latent curing agent and viscosity.
- b) utilization of composition in spot/body welding step of an automobile assembly line.

With respect to a) Nakano et al teach that epoxy resins are widely used as an adhesive or paint composition because of their adhesion to various materials with excellent mechanical properties, electrical properties and chemical resistance (column 1, lines 16-19). The composition is incorporated with a latent curing agent (column 3, lines 14-15) to accelerate curing of resins. The composition has preferably a viscosity of not less than 500 poises (column 3, lines 12-13) and reads on the viscosity of greater than 50 Pas of claim 13. Therefore, it would have been obvious to one skilled in the art at the time invention was made to add thermosetting epoxy resins and latent curing agent to the two part curing composition of Wilkins to realize above mentioned advantages.

With respect to b) Nakano et al teach that the epoxy resin composition has excellent shower resistance and wiping properties and is useful as an adhesive, particularly as a structural adhesive in an assembly line of automobiles (abstract). The composition can be used in spot welding in the assembly line of automobiles (column 3, lines 34-35) and reads on claims 14-16 in light of specification of the instant invention. Therefore, it would have been obvious to one skilled in the art at the time invention was made to apply the composition of Wilkins in the spot welding step because Nakano et al have proven successfully the process of applying resin composition comprising a gelling agent in the spot welding step of assembly line of automobiles and one of ordinary skill in the art

would have expected the process to work for the two part curing composition of Wilkins, motivated by expectation of success.

Response to Arguments

Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the amendments and new ground(s) of rejection.

Conclusion

The "X" references (GB 1, 157, 436 and EP 0 433 069 A2) from the international search report has been considered and used in the rejection. The other "X" references have been considered but were not applicable.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

Art Unit: 1713

the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karuna P. Reddy whose telephone number is (571) 272-6566.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Karuna P Reddy
Examiner
Art Unit 1713



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